

We claim:

1. An apparatus comprising:
 - a plurality of image capture devices, each of which is configured to capture
 - 5 images and to transmit captured images;
 - a node in communication with the image capture devices, in which the node is configured to:
 - receive the captured images;
 - store the captured image;
 - 10 associate each captured image with a respective location based on its respective image capture device;
 - select at least one neuron;
 - transmit a first captured image to the at least one neuron;
 - receive a result from the at least one neuron;
 - 15 determine whether the result indicates that a human is present in the first captured image;
 - select at least one additional neuron based on whether the result indicates that a human is present in the first captured image;
 - transmit the first captured image to the at least one additional
 - 20 neurons;
 - receive at least one additional result from the at least one additional neuron;
 - determine whether the at least one additional result indicates that a human is present in the first captured image;
 - 25 determine an alarm condition based on the at least one additional result.
2. The apparatus of claim 1, in which at least one image capture device is configured to preprocess a captured images
- 30 3. The apparatus of claim 1, in which the node is further configured to preprocess at least some of the captured images.

4. The apparatus of claim 1, in which at least one image capture device is configured to:
- 5 detect motion and
- capture an image in response to detected motion.
5. The apparatus of claim 1, in which the result received from the at least one neuron is a one-bit indication of the result.
- 10 6. The apparatus of claim 1, in which the result received from the at least one neuron indicates one of
- the presence of a human in the image,
- the absence of a human in the image, and
- uncertainty as to whether there is a human present in the image.
- 15 7. The apparatus of claim 1, in which the at least one neuron has an associated weight, and in which the node is configured to select the at least one additional neurons based further on the weight of the at least one neuron.
- 20 8. The apparatus of claim 1, in which the at least one neuron has an associated weight, and in which the node is configured to determine an alarm condition based further on the weight of the at least one neuron.
9. The apparatus of claim 1, in which each neuron has an associated weight,
- 25 and in which the node is configured to adjust the weights based on based further on the results.
10. The apparatus of claim 1, further comprising:
- a layer analyzer which is configured to allocate the neurons to different
- 30 layers, based on respective weights of the neurons.

11. The apparatus of claim 1, in at least some of the image capture device are arranged to capture images from areas in which human activity is desired to be substantially nonexistent

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12. A method comprising:

receiving the captured images from a plurality of image capture devices;

storing the captured image;

10 associating each captured image with a respective location based on its respective image capture device;

selecting at least one neuron;

transmitting a first captured image to the at least one neuron;

receiving a result from the at least one neuron;

15 determining whether the result indicates that a human is present in the first captured image;

selecting at least one additional neuron based on whether the result indicates that a human is present in the first captured image;

20 transmitting the first captured image to the at least one additional neurons;

receiving at least one additional result from the at least one additional neuron;

determining whether the at least one additional result indicates that a human is present in the first captured image; and

25 determining an alarm condition based on the at least one additional result.

12. The method of claim 1, in which the result received from the at least one neuron indicates one of

30 the presence of a human in the image,

the absence of a human in the image, and

uncertainty as to whether there is a human present in the image.

13. The method of claim 1, in which each neuron has an associated weight, and in which the node is configured to adjust the weights based on based further on the results.

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